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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/171,043	10/09/1998	PAUL M. KONNERSMAN	08086/002002	7577	
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Hale and Dorr, LLP			EXAMINER		
60 State Street Boston, MA 0	2109-1803		LASTRA, DANIEL		
			ART UNIT	PAPER NUMBER	
			2162		
			DATE MAILED: 12/28/2001		

Please find below and/or attached an Office communication concerning this application or proceeding.

•			M_{λ}				
	Application No.	Applicant(s)					
Office Action Summany	09/171,043	KONNERSMAN, F	PAUL M.				
Office Action Summary	Examiner	Art Unit					
	DANIEL LASTRA	2162					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet w	with the correspondence ad	dress				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a y within the statutory minimum of th will apply and will expire SIX (6) MC e, cause the application to become a	a reply be timely filed hirty (30) days will be considered timely DNTHS from the mailing date of this co ABANDONED (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on	·						
	nis action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-13</u> is/are pending in the application	٦.						
4a) Of the above claim(s) is/are withdra	wn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-13</u> is/are rejected.							
7) Claim(s) is/are objected to.)☐ Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.						
Application Papers							
9) The specification is objected to by the Examine	er.		*				
10) The drawing(s) filed on is/are: a) acce	pted or b) objected to by	the Examiner.					
Applicant may not request that any objection to th	e drawing(s) be held in abe	yance. See 37 CFR 1.85(a).					
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
If approved, corrected drawings are required in re	ply to this Office action.						
12)☐ The oath or declaration is objected to by the Ex	aminer.						
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C	. § 119(a)-(d) or (f).					
a)☐ All b)☐ Some * c)☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
 3. Copies of the certified copies of the prio application from the International Bu * See the attached detailed Office action for a list 	reau (PCT Rule 17.2(a))		Stage				
14)☐ Acknowledgment is made of a claim for domesti	•		application)				
a) ☐ The translation of the foreign language pro	ovisional application has	been received.	αρμιισατιστή.				
Attachment(s)	ic priority under 35 U.S.C	. 99 120 and/or 121.	,				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice o	v Summary (PTO-413) Paper No(f Informal Patent Application (PT0					
B) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5	. 6) Other:						

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1. Claims 1-13 have been examined.

Drawings

2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on May 31, 2001 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Nock (U.S. 6,144,967).

As per claim 1, Nock teaches:

"supporting the work of the process by rendering said process models as elements of a computer-based system and supporting the work of the process by rendering said project models as elements of a computer-based system..." (see figure 1; description of the preferred embodiment)

As per claim 2, Nock teaches:

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"instantiating a plurality of objects by abstract or concrete classes, and including at least a decision class and a data class" (see column 8, lines 20-67) and

"...relating each decision object to one or more data objects which it produces" (see figures 5-7; and column 10, lines 47-55 and column 7, lines 22-67);

"...requiring, for at least one decision object, at least one data object as a prerequisite to its activation or completion..." (see figure 7 and columns 10 and 11);

"... optionally generating additional subclasses or instances of said decision and data classes..." (see figure 5, item "carnivore" and "herbivore");

As per claim 3, Nock teaches: "... comprising relating an arc or link class linking a first decision with a second decision..." (see figure 5 and columns 10-11).

As per claim 4, Nock teaches:

"...comprising generating a decision role class specialized into at least two subclasses, each with differing behaviors..." (see figure 4 and column 8, lines 35-67) and;

"... defining for each decision role class the communication requirements among the incumbents of roles participating in a decision, the rights of each such role class incumbents with respect to a) entering data elements in a database, b) modifying elements in a database and/or c) reading elements from a database..." (see figures 3 and 4, column 6, lines 7-19, column 10, lines 47-67 – column 11, lines 1-52).

As per claim 5, Nock teaches: "...comprising utilizing messaging between said nodes and arcs and collections of said arcs and determining the membership of said

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collections by at least one of their entry nodes and exit nodes..." (see figure 5 and columns 25-26).

As per claim 6, Nock teaches: "A computer implemented method of modeling and managing work processes among a plurality of participants comprising using a network whose nodes are abstract decision situations, and providing arcs directed by decisions based on logical precedence..." (see figures 2 and 5 and columns 10-11).

As per claim 7, Nock teaches: "comprising requiring nodes to support participation of multiple persons in differentiated roles..." (see figure 5 and columns 10-11).

As per claim 8, Nock teaches:

"requiring that incumbents of exactly one differentiated role make a choice modeled by an abstract decision situation" (see figure 7, item 706 and columns 10-11), and

"requiring that the incumbents of a second differentiated role have notice, elapsed time and access to the incumbent of the first role prior to the incumbent of said first role having made said choice" (see figure 7, item 700 and columns 10-11),

"requiring that the incumbents of a third differentiated role have the opportunity to inspect the results of the choice made by the incumbent of the first role after said choice, and to accept or reject said results, with or without reference to established criteria" (see figure 7, item 714 and columns 10-11), and

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"requiring that the incumbents of a fourth differentiated role have timely notice of the results of the choice made by the incumbent of the first role after said choice" (see figure 7, item 718 and columns 10-11).

As per claim 9, Nock teaches:

"requiring that the incumbents of a fifth differentiated role have the opportunity to inspect the results of the choice made by the incumbent of the first role after said choice, and to accept or reject said results according to its conformance or non-conformance to established criteria" (see figure 7, item 740 and columns 10-11).

As per claim 10, Nock teaches:

"using said process models to instantiate project models, and using said process and project models to manage, direct, and control the work of the process" (see figure 7 and columns 10-11).

As per claim 11, Nock teaches:

"providing an abstract rule class as a subclass of the data class" (see figure 2, item "Zoo Keepers")

"providing that said abstract rule class is specialized into concrete classes that include at least a class each of whose instances completely determine the result by choosing the value of its associated decision's data object" (see figure 5 and column 9, lines 55-67 – column 10, lines 1-20), and

"providing none or more additional concrete rule classes whose instances (i) determine the associated decision objects' requirement for some other specific data object, (ii) determine the associated decision objects' association with a specific role

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object, (iii) determine the incumbent of a specific role object associated decision's data object, and/or (iv) determine the use of a different role object associated with said decision object" (see figures 5 and 7).

As per claim 12, Nock teaches:

"providing an extensible, object-oriented framework for modeling processes, and providing abstract and concrete classes as elements of said framework, whose objects map plural participants in the process" (see summary of the invention).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nock (U.S. 6,144,967).

As per claim 13, Nock teaches:

"initializing all direct arcs and arc collections with an inactive state" (see figure 7, item 706)

"activating an entry collection of directed arcs which share a common entry node upon completion of the entry node's function" (see figure 7, columns 10-11)

"activating all members of said entry collection upon activation of said entry collection" (see figure 7, columns 10-11)

"activating an exit collection of directed arcs which share a common exit node upon activation of any member of said exit collection" (see figure 7), and

Nock does not expressly teach, "testing, upon activation of said exit collection, other members of said exit collection for said member's active/inactive state and if any member of said exit collection is inactive, then stop testing and return said exit collection of its inactive state, and otherwise, if all members have tested active, activate their common exit node". However, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that if the member is inactive, this would indicate to the system to stop the test and exist the program.

Conclusion

5. Applicant's arguments with respect to claims 1-13 have been considered but are most in view of the new ground(s) of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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The Applicant argues that the subject matter of Nock is "loosely" related to that of the claimed invention. The Applicant also argues that Nock's framework produces object models of highly automated processes for analyzing computer logs or files and that, in its preferred embodiment, it has only one participant, the operator, who makes only a couple of decisions. According to the Applicant, this is guite different from the object-oriented multi-participant system of the claimed invention, which produces object models of processes that can range from completely manual (other than the communication and control which the model's implementation automates using a computer system) to a fully automated system. The Applicant further argues that unlike Nock, in the claimed invention the data need not be restricted to computer logs and files. Furthermore, the Applicant alleges that the processes to which the claimed invention is directed are those that are fundamentally collaborative requiring interaction among participants. This is why, according to the Applicant, there are classes of decision, decision roles, and data in Konnersman which are important to the invention. The Applicant argues that in Nock they simply do not exist.

The Examiner answers that in re **Hiniker Co**., 47 USPQ2d 1523, 1529 (Fed. Cir. 1998) the court ruled: "The name of the game is the claim. Although operational characteristics of a product may be apparent from the specification, we will not read such characteristics into the claims when they cannot be fairly connected to the structure recited in the claims". See **In re Self**, 671 F.2d 1344, 1348, 213 USPQ 1, 5 (CCPA 1982). When given their broadest reasonable interpretation, the claims on examination sweep in the prior art, and the prior art, which is Nock, would have directed

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an artisan of ordinary skill to make the rejection cited by the examiner. Furthermore, at the time the application was made, it was known that merely providing an automatic means to replace a manual activity which accomplishes the same result is not sufficient to distinguish a claimed "invention" over the prior art. In re Venner, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). That the application method in the application can range from manual to automatic would not patentably distinguish it from the prior art. The end result is the same as compared to the manual method. Also Nock teaches in columns 10 and 11, a Zoo administration system with classes and subclasses, where there is interaction between participants.

With regard to claim 1, the Applicant argues that Nock does not address processes or projects but deals explicitly with one process namely that of analyzing a computer generated log. This process differs substantially from those which are the objects of the claimed invention, which anticipates the need for multiple interactions between a computer-based system and numerous participants, according to the Application. Thus, the Applicant argues that claim 1 requires both plural process models and plural project models and making those models elements of a computer-based system. The Applicant further argues that, to the contrary, in Nock there is only one specific process which is dealt with, not a number of process models and project models. Thus the Applicant alleges that Nock simply does not describe, suggest, or teach the claimed invention, and that Nock merely takes a procedural program and implements it in object form, which is not possible with the claimed invention.

The Examiner answers that columns 10-11 and figure 7 teach that Nock deals with processes or projects, which anticipates the need for multiple interactions between a computer-based system and numerous participants. Nock teaches a Zoo administration system where the different participants need to interact with each other to administrate the Zoo. Also, even if Nock invention would deal with only one project, this would not patentably distinguish the Applicant's claimed invention from Nock as the concept taught in Nock would be applied to other processes.

With regard to claim 2, the Applicant argues that there is nothing in Nock which relates to the decision object to one or more data objects, nothing which requires for at least one decision object at least one data object as a prerequisite to its activation or completion, nothing which optionally generates additional subclasses or instances of the decision and data classes, nothing which instantiates a plurality of objects by abstract or concrete classes and nothing which relates each decision object to one or more data objects which it produces. According to the Applicant, the structure of claim 2 is not met by Nock. The Applicant further argues that the operation of Nock is merely that of a typical object-oriented system, and that it is unlike that of the claimed invention which relates back to the description therein.

The Examiner answers that in re **Hiniker Co.**, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998) the court ruled: "The name of the game is the claim. Although operational characteristics of a product may be apparent from the specification, we will not read such characteristics into the claims when they cannot be fairly connected to the structure recited in the claims". See **In re Self**, 671 F.2d 1344, 1348, 213 USPQ 1, 5

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(CCPA 1982). When given their broadest reasonable interpretation, the claims on examination sweep in the prior art, and the prior art, which is Nock, would have directed an artisan of ordinary skill to make the rejection cited by the Examiner. Nock's columns 10 and 11 and figures 5-7 teach a Zoo administration system where objects have to wait for function operations as a prerequisite to performing its functions.

The Applicant argues that Nock does not provide for messaging between the nodes and arcs, and the collections of arcs as called for and described in the claimed invention. The Applicant further argues that Nock does not provide any such structure between his objects even though he does identify and provide for communication between the objects, as any object-oriented system. The interrelationships called for by claim 5 and the communications there between are simply not described in, for example, Figure 5 of Nock, according to the Applicant. In addition, the Applicant argues that claim 6, which requires a network with nodes as abstract decision situations and arcs directed by decisions based on logical precedence, is not described anywhere within Nock. In particular, it is not described in Figure 5 wherein one has merely the ordinary flow of information in an object-oriented program according to the Applicant. The Applicant argues that, similarly, the figure does not describe a method for modeling and managing work processes as called by the claim.

The Examiner answers that Nock's figure 7 and column 10-11 teach a Zoo administration system where messages or command operations are transmitted between classes and objects, so that the system can be administered.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL LASTRA whose telephone number is 703-306-5933. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ERIC W STAMBER can be reached on 703-305-8469. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

D.L

Daniel Lastra

December 19, 2001

ERIC W. STAMBER
PRIMARY EXAMINER